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INTELLECTUAL PROPERTY PROVISIONS

FOR

DOMESTIC SMALL BUSINESS, EDUCATIONAL INSTITUTIONS, AND OTHER NONPROFIT ORGANIZATIONS (RESEARCH, DEVELOPMENT, OR DEMONSTRATION)

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CLAUSES

CLAUSE 1 -- AUTHORIZATION AND CONSENT (JUL 1995)
Derived from FAR 52.227-1

A. The Government authorizes and consents to all use and manufacture, in performing this subcontract or any subcontract at any tier, of any invention described in and covered by a United States patent

1. Embodied in the structure or composition of any article the delivery of which is accepted by the Government through NREL under this subcontract or;

2. Used in machinery, tools, or methods whose use necessarily results from compliance by the Subcontractor or a lower-tier subcontractor with--

(i) Specifications or written provisions forming a part of this subcontract or

(ii) Specific written instructions given by the DOE through NREL directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this subcontract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

B. The Subcontractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold); however, omission of this clause from any lower-tier subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

ALTERNATE I (APR 1984)

Alternate I of this clause is applicable if this award is for the conduct of research, development, or demonstration

The following is substituted for paragraph (A) of the clause:

A. The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this subcontract or any subcontract at any tier.

ALTERNATE II (APR 1984)

Alternate II of this clause is applicable if this award includes an order or lower-tier subcontract for communication services and facilities

The following is substituted for paragraph (A) of the clause:

A. The Government authorizes and consents to all use and manufacture in the performance of any order at any tier or subcontract at any tier placed under this subcontract for communication services and facilities for which rates, charges, and tariffs are not established by a government regulatory body, of any invention described in and covered by a United States patent

1. Embodied in the structure or composition of any article the delivery of which is accepted by the Government through NREL under this subcontract or

2. Used in machinery, tools, or methods whose use necessarily results from compliance by the Subcontractor or a lower-tier subcontractor with specifications or written provisions forming a part of this subcontract or with specific written instructions given by the DOE through NREL directing the manner of performance.

CLAUSE 2 -- NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)
Derived from FAR 52.227-2

The provisions of this clause shall be applicable only if the amount of this award exceeds $100,000, and the award is for the conduct of construction, research, development, or demonstration

A. The Subcontractor shall report to the DOE through NREL, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this subcontract of which the Subcontractor has knowledge.

B. In the event of any claim or suit against the Government or NREL on account of any alleged patent or copyright infringement arising out of the performance of this subcontract or out of the use of any supplies furnished or work or services performed under this subcontract, the Subcontractor shall furnish to the Government, when

requested by the DOE through NREL, all evidence and information in possession of the Subcontractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Subcontractor has agreed to indemnify the Government.

C. The Subcontractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer lower-tier subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at FAR 2.101.

CLAUSE 3 -- RIGHTS IN DATA - GENERAL (JUN 1987), AS MODIFIED BY DEAR 927.409 (EFFECTIVE APR 1998)
Derived from FAR 52.227-14

If this award requires the use or delivery of limited rights data and/or restricted computer software, Alternates II and/or III are incorporated , unless modified upon recommendation of Patent Counsel.

A. Definitions.

1. "Computer data bases," as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

2. "Computer software," as used in this clause, means--

   (i) Computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and

   (ii) Data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.

3. "Data," as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. For the purposes of this clause, the term does not include data incidental to the administration of this subcontract, such as financial, administrative, cost and pricing, or management information.

4. "Form, fit, and function data," as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

5. "Limited rights data," as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of subparagraph (G)(2) of this section if included in this clause.

6. "Restricted computer software," as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of subparagraph (G)(3) of this section if included in this clause.

7. "Technical data," as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

8. "Unlimited rights," as used in this clause, means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

B. Allocation of rights.

1. Except as provided in paragraph (C) below regarding copyright, the Government shall have unlimited rights in:

(i) Data first produced in the performance of this subcontract;

(ii) Form, fit, and function data delivered under this subcontract;

(iii) Data delivered under this subcontract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair items, components, or processes delivered or furnished for use under this subcontract; and

(iv) All other data delivered under this subcontract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (G) below.

2. The Subcontractor shall have the right to:

(i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Subcontractor in the performance of this subcontract, unless provided otherwise in paragraph (D) below;

(ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (G) below;

(iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (E) and (F) below; and

(iv) Establish claim to copyright subsisting in data first produced in the performance of this subcontract to the extent provided in subparagraph (C)(1) below.

C. Copyright.

1. Data first produced in the performance of this subcontract. Unless provided otherwise in subparagraph (D) below, the Subcontractor may establish, without prior approval of the DOE, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this subcontract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the DOE is required to establish claim to copyright subsisting in all other data first produced in the performance of this subcontract. When claim to copyright is made, the Subcontractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including subcontract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software the

Subcontractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Subcontractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

2. Data not first produced in the performance of this subcontract. The Subcontractor shall not, without prior written permission of the DOE, incorporate in data delivered under this subcontract any data not first produced in the performance of this subcontract and which contains the copyright notice of 17 U.S.C. 401 and 402, unless the Subcontractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (1) above; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (G)(3) below if included in this subcontract or as otherwise may be provided in a collateral agreement incorporated in or made part of this subcontract.

3. Removal of copyright notices.

   The Government agrees not to remove any copyright notices place on data pursuant to this paragraph (C), and to include such notices on all reproductions of the data.

D. Release, publication and use of data.

1. The Subcontractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Subcontractor in the performance of this subcontract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided below in this paragraph or expressly set forth in this subcontract.

2. The Subcontractor agrees that to the extent it receives or is given access to data necessary for the performance of this subcontract which contain restrictive markings, the Subcontractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the DOE.

3. The Subcontractor agrees not to assert copyright in computer software first produced in the performance of this subcontract without prior written permission of the DOE Patent Counsel assisting the subcontracting activity. When such

permission is granted, the Patent Counsel shall specify appropriate terms, conditions, and submission requirements to assure utilization, dissemination, and commercialization of the data. The Subcontractor, when requested, shall promptly deliver to Patent Counsel a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled.

E. Unauthorized marking of data.

1. Notwithstanding any other provisions of this subcontract concerning inspection or acceptance, if any data delivered under this subcontract are marked with the notices specified in subparagraphs (G)(2) or (G)(3) below and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this subcontract, the DOE may at any time either return the data to the Subcontractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The DOE shall make written inquiry to the Subcontractor affording the Subcontractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Subcontractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the DOE for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will not longer be made subject to any disclosure prohibitions.

(iii) If the Subcontractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (i) above, the DOE shall consider such written justification and determine whether or not the markings are to be canceled or ignore. If the DOE determines that the markings are authorized, the Subcontractor shall be so notified in writing. If the DOE determines, with concurrence of the Head of the Contracting Activity, that the markings are not authorized, the DOE shall furnish the Subcontractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Subcontractor files suit in a court of competent jurisdiction within 90 days of receipt of the DOE's decision. The Government shall continue to abide by the markings under this subdivision (iii) until final resolution of the matter either by the DOE's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no

longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

2. The time limits in the procedures set forth in subparagraph (1) above may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

3. This paragraph (E) does not apply if this subcontract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

4. Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Subcontractor is not precluded by this paragraph (E) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this subcontract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this subcontract.

F. Omitted or incorrect markings.

1. Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (G) below, or the copyright notice required by paragraph (C) above, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Subcontractor may request, within 6 months (or a longer time approved by the DOE for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Subcontractor's expense, and the DOE may agree to do so if the Subcontractor:

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the use of the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

2. The DOE may also

(i) Permit correction at the Subcontractor's expense of incorrect notices if the Subcontractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or

(ii) Correct any incorrect notices.

G. Protection of limited rights data and restricted computer software.

1. When data other than that listed in subparagraphs (B)(1)(i), (ii), and (iii) above are specified to be delivered under this subcontract and qualify as either limited rights data or restricted computer software, if the Subcontractor desires to continue protection of such data, the Subcontractor shall withhold such data and not furnish them to the Government under this subcontract. As a condition to this withholding, the Subcontractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer data base for delivery to the Government is to be treated as limited rights data and not restricted computer software.

2. [Reserved.]

3. [Reserved.]

H. Lower-tier subcontracting.

The Subcontractor has the responsibility to obtain from its lower-tier subcontractors all data and rights therein necessary to fulfill the Subcontractor's obligations to the Government under this subcontract. If a lower-tier subcontractor refuses to accept terms affording the Government such rights, the Subcontractor shall promptly bring such refusal to the attention of the DOE and not proceed with lower-tier subcontract award without further authorization.

I. Relationship to patents.

Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

J. The Subcontractor agrees, except as may be otherwise specified in this subcontract for specific data items listed as not subject to this paragraph, that the DOE or an authorized representative may, up to three years after acceptance of all items to be delivered under this subcontract, inspect at the Subcontractor's facility any data withheld pursuant to

paragraph (g)(1) above, for purposes of verifying the Subcontractor's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Subcontractor whose data are to be inspected demonstrates to the DOE that there would be a possible conflict of interest if the inspection where made by a particular representative, the DOE shall designate an alternate inspector.

ALTERNATE II

(G)(2) Notwithstanding subparagraph (G)(1) of this clause, the subcontract may identify and specify the delivery of limited rights data, or the DOE may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Subcontractor may affix the following "Limited Rights Notice" to the data and the Government will thereafter treat the data, subject to the provisions of paragraphs (E) and (F) of this clause, in accordance with such Notice:

LIMITED RIGHTS NOTICE (JUN 1987)

A. These data are submitted with limited rights under Government Subcontract No.(identify the subcontract) (and lower-tier subcontract No. , if appropriate). These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Subcontractor, be used for purposes of manufacture nor disclosed outside the Government or NREL; except that the Government may disclose these data outside the Government through NREL for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure:

[Agencies may list additional purposes as set forth in 27.404(d)(1) or if none, so state]

B. This Notice shall be marked on any reproduction of these data, in whole or in part.

ALTERNATE III

(G)(3)(i) Notwithstanding subparagraph (G)(1) of this clause, the subcontract may identify and specify the delivery of restricted computer software, or the Government may require by written request the delivery of restricted computer software that has been withheld or would otherwise be withholdable. If delivery of such computer software is so required, the Subcontractor may affix the following "Restricted Rights Notice" to the computer software and the Government will thereafter treat the computer software, subject to paragraphs (E) and (F) of this clause, in accordance with the Notice:

RESTRICTED RIGHTS NOTICE (JUN 1987)

A. This computer software is submitted with restricted rights under Government Subcontract No. (identify the subcontract) (and lower-tier subcontract No. , if appropriate). It may not be used, reproduced, or disclosed by the Government or NREL except as provided in paragraph (B) of this Notice or as otherwise expressly stated in the subcontract.

B. This computer software may be:

1. Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

2. Used or copied for use in a backup computer if any computer for which it was acquired is inoperative;

3. Reproduced for safekeeping (archives) or backup purposes;

4. Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software incorporating restricted computer software are made subject to the same restricted rights;

5. Disclosed to and reproduced for use by support service Subcontractors in accordance with subparagraphs (B)(1) through (4) of this clause, provided the Government and NREL makes such disclosure or reproduction subject to these restricted rights; and

6. Used or copied for use in or transferred to a replacement computer.

C. Notwithstanding the foregoing, if this computer software is published copyrighted computer software, it is licensed to the Government, without disclosure prohibitions, with the minimum rights set forth in paragraph (B) of this clause.

D. Any others rights or limitations regarding the use, duplication, or disclosure of this computer software are to be expressly stated in, or incorporated in, the subcontract.

E. This Notice shall be marked on any reproduction of this computer software, in whole or in part.

(G)(3)(ii) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

RESTRICTED RIGHTS NOTICE SHORT FORM (JUN 1987)

Use, reproduction, or disclosure is subject to restrictions set forth in Subcontract No. (identify the subcontract) (and lower-tier subcontract No. , if appropriate) with (name of Subcontractor and lower-tier subcontractor)."

(G)(3)(iii) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, it will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause, unless the Subcontractor includes the following statement with such copyright notice: "Unpublished-rights reserved under the Copyright Laws of the United States."

CLAUSE 4 -- ADDITIONAL DATA REQUIREMENTS (JUN 1987)
Derived from FAR 52.227-16

This clause does not apply to this award if the award is for the conduct of basic or applied research, as set out elsewhere in this award, to be performed solely by a college or university, and the estimated cost is not in excess of $500,000

A. In addition to the data (as defined in the clause at 52.227-14, Rights in Data-General clause or other equivalent included in this subcontract) specified elsewhere in this subcontract to be delivered, the DOE may, at any time during subcontract performance or within a period of 3 years after acceptance of all items to be delivered under this subcontract, order any data first produced or specifically used in the performance of this subcontract.

B. The Rights in Data-General clause or other equivalent included in this subcontract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall require the Subcontractor to deliver any data the withholding of which is authorized by the Rights in Data-General or other equivalent clause of this subcontract, or data which are specifically identified in this subcontract as not subject to this clause.

C. When data are to be delivered under this clause, the Subcontractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

D. The DOE may release the Subcontractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (A) of this clause.

CLAUSE 5 -- RIGHTS TO PROPOSAL DATA (TECHNICAL) (JUN 1987)
Derived from FAR 52.227-23

(As prescribed in 27.409(s), the following clause has been completed and inserted in the Schedule of the subcontract:)

Except for data contained on pages _____, it is agreed that as a condition of award of this subcontract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data--General" clause contained in this subcontract) in and to the technical data contained in the proposal dated _____, upon which this subcontract is based.

CLAUSE 6 -- REFUND OF ROYALTIES (FEB 1995)
Derived from DEAR 952.227-9

A. The subcontract price includes certain amounts for royalties payable by the Subcontractor or lower-tier subcontractors or both, which amounts have been reported to the DOE through NREL.

B. The term "royalties," as used in this clause, refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications in connection with performing this subcontract or any lower-tier subcontract here-under. The term also includes any costs or charges associated with the access to, use of, or other right pertaining to data that is represented to be proprietary and is related to the performance of this subcontract or the copying of such data or data that is copyrighted.

C. The Subcontractor shall furnish to the DOE through NREL, before final payment under this subcontract, a statement of royalties paid or required to be paid in connection with performing this subcontract and lower-tier subcontracts hereunder together with the reasons.

D. The Subcontractor will be compensated for royalties reported under paragraph (C) of this clause, only to the extent that such royalties were included in the subcontract price and are determined by the DOE to be properly chargeable to the Government and allocable to the subcontract. To the extent that any royalties that are included in the subcontract price are not, in fact, paid by the Subcontractor or are determined by the DOE not to be properly chargeable to the Government and allocable to the subcontract, the subcontract price shall be reduced. Repayment or credit to the Government shall be made as the DOE directs. The approval by DOE of any individual payments or royalties shall not prevent the Government from contesting at any time the enforceability, validity, scope of, or title to, any patent or the proprietary nature of data pursuant to which a royalty or other payment is to be or has been made.

E. If, at any time within 3 years after final payment under this subcontract, the Subcontractor for any reason is relieved in whole or in part from the payment of the royalties included in the final subcontract price as adjusted pursuant to paragraph (D) of this clause, the Subcontractor shall promptly notify the DOE of that fact and shall reimburse the Government in a corresponding amount.

F. The substance of this clause, including this paragraph (F), shall be included in any lower-tier subcontract in which the amount of royalties reported during negotiation of the lower-tier subcontract exceeds $250.

CLAUSE 7 -- PATENT RIGHTS-RETENTION BY THE SUBCONTRACTOR (SHORT FORM) (FEB 1995)
Derived from DEAR 952.227-11

This clause applies only if the awardee is a domestic small business or domestic nonprofit organization at the time of award, and the award is for the conduct of research, development, or demonstration

A. Definitions.

1. "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

2. "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.

3. "Nonprofit organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of l954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

4. "Practical application" means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that is benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

5. "Small business firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

6. "Subject Invention" means any invention of the Subcontractor conceived or first actually reduced to practice in the performance of work under this subcontract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of subcontract performance.

7. "Agency licensing regulations" and "agency regulations concerning the licensing of Government-owned inventions" mean the Department of Energy patent licensing regulations at 10 CFR Part 781.

B. Allocation of principal rights.

The Subcontractor may retain the entire right, title, and interest throughout the world to each Subject Invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any Subject Invention in which the Subcontractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the Subject Invention throughout the world.

C. Invention disclosure, election of title, and filing of patent application by Subcontractor.

1. The Subcontractor will disclose each Subject Invention to the Department of Energy (DOE) within 2 months after the inventor discloses it in writing to Subcontractor personnel responsible for patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the subcontract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the DOE, the Subcontractor will promptly notify that agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Subcontractor.

2. The Subcontractor will elect in writing whether or not to retain title to any such invention by notifying DOE within 2 years of disclosure to DOE. However, in any case where publication, on sale, or public use has initiated the l-year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by DOE to a date that is no more than 60 days prior to the end of the statutory period.

3. The Subcontractor will file its initial patent application on a Subject Invention to which it elects to retain title within 1 year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Subcontractor will file patent applications in additional countries or international patent offices within either 10 months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

4. Requests for extension of the time for disclosure, election, and filing under subparagraphs (C)(l), (2), and (3) of this clause may, at the discretion of the agency, be granted.

D. Conditions when the Government may obtain title.

The Subcontractor will convey to the Federal agency, upon written request, title to any Subject Invention--

1. If the Subcontractor fails to disclose or elect title to the Subject Invention within the times specified in paragraph (C) of this clause, or elects not to retain title; provided, that DOE may only request title within 60 days after learning of the failure of the Subcontractor to disclose or elect within the specified times.

2. In those countries in which the Subcontractor fails to file patent applications within the times specified in paragraph (C) of this clause; provided, however, that if the Subcontractor has filed a patent application in a country after the times specified in paragraph (C) of this clause, but prior to its receipt of the written request of the Federal agency, the Subcontractor shall continue to retain title in that country.

3. In any country in which the Subcontractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a Subject Invention.

E. Minimum rights to Subcontractor and protection of the Subcontractor right to file.

1. The Subcontractor will retain a nonexclusive royalty-free license throughout the world in each Subject Invention to which the Government obtains title, except if the Subcontractor fails to disclose the invention within the times specified in paragraph (C) of this clause. The Subcontractor's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Subcontractor is a party and includes the right to grant sublicenses of the same scope to the extent the Subcontractor was legally obligated to do so at the time the subcontract was awarded. The license is transferable only with the approval of the Federal agency, except when transferred to the successor of that part of the Subcontractor's business to which the invention pertains.

2. The Subcontractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of Subject Invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Subcontractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Subcontractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

3. Before revocation or modification of the license, DOE will furnish the Subcontractor a written notice of its intention to revoke or modify the license, and the Subcontractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Subcontractor) after the notice to show cause why the license should not be revoked or modified. The Subcontractor has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and agency regulations concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

F. Subcontractor action to protect the Government's interest.

1. The Subcontractor agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to--

(i) Establish or confirm the rights the Government has throughout the world in those Subject Inventions to which the Subcontractor elects to retain title, and

(ii) Convey title to DOE when requested under paragraph (D) of this clause and to enable the Government to obtain patent protection throughout the world in that Subject Invention.

2. The Subcontractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Subcontractor each Subject Invention made under subcontract in order that the Subcontractor can comply with the disclosure provisions of paragraph (C) of this clause, and to execute all papers necessary to file patent applications on Subject Inventions and to establish the Government's rights in the Subject Inventions. This disclosure format should require, as a minimum, the information required by subparagraph (C)(1) of this clause. The Subcontractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

3. The Subcontractor will notify DOE of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

4. The Subcontractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a Subject Invention, the following statement, "This invention was made with Government support under (identify the subcontract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

G. Lower-tier Subcontracts.

1. The Subcontractor will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or domestic nonprofit organization. The lower-tier subcontractor will retain all rights provided for the Subcontractor in this clause, and the Subcontractor will not, as part of the consideration for awarding the lower-tier subcontract, obtain rights in the lower-tier subcontractor's Subject Inventions.

2. The Subcontractor shall include in all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work the patent rights clause at 952.227-13.

3. In the case of subcontracts, at any tier, DOE, lower-tier subcontractor, and the Subcontractor agree that the mutual obligations of the parties created by this clause constitute a subcontract between the lower-tier subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (J) of this clause.

H. Reporting on utilization of Subject Inventions.

The Subcontractor agrees to submit, on request, periodic reports no more frequently than annually on the utilization of a Subject Invention or on efforts at obtaining such utilization that are being made by the Subcontractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received, by the Subcontractor, and such other data and information as DOE may reasonably specify. The Subcontractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by that agency in accordance with paragraph (J) of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Subcontractor.

I. Preference for United States industry.

Notwithstanding any other provision of this clause, the Subcontractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any Subject Invention in the United States unless such person agrees that any product embodying the Subject Invention or produced through the use of the Subject Invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Subcontractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

J. March-in rights.

The Subcontractor agrees that, with respect to any Subject Invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Subcontractor, an assignee or exclusive licensee of a Subject Invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Subcontractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that--

1. Such action is necessary because the Subcontractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the Subject Invention in such field of use;

2. Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Subcontractor, assignee, or their licensees;

3. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Subcontractor, assignee, or licensees; or

4. Such action is necessary because the agreement required by paragraph (I) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any Subject Invention in the United States is in breach of such agreement.

K. Special provisions for subcontracts with nonprofit organizations.

If the Subcontractor is a nonprofit organization, it agrees that--

1. Rights to a Subject Invention in the United States may not be assigned without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions as the Subcontractor;

2. The Subcontractor will share royalties collected on a Subject Invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the Subject Invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

3. The balance of any royalties or income earned by the Subcontractor with respect to Subject Inventions, after payment of expenses (including payments to inventors) incidental to the administration of Subject Inventions will be utilized for the support of scientific research or education; and

4. It will make efforts that are reasonable under the circumstances to attract licensees of Subject Inventions that are small business firms, and that it will give a preference to a small business firm when licensing a Subject Invention if the Subcontractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Subcontractor is also satisfied that

the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Subcontractor. However, the Subcontractor agrees that the Secretary of Commerce may review the Subcontractor's licensing program and decisions regarding small business applicants, and the Subcontractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Subcontractor could take reasonable steps to more effectively implement the requirements of this subparagraph (K)(4).

L. Communications.

1. The Subcontractor shall direct any notification, disclosure, or request to DOE provided for in this clause to the DOE Patent Counsel assisting the DOE subcontracting activity, with a copy of the communication to the DOE Contracting Officer through NREL.

2. Each exercise of discretion or decision provided for in this clause, except subparagraph (K)(4), is reserved for the DOE Patent Counsel and is not a claim or dispute and is not subject to the Contract Disputes Act of 1978.

3. Upon request of the DOE Patent Counsel or the DOE, the Subcontractor shall provide any or all of the following:

   (i) A copy of the patent application, filing date, serial number and title, patent number, and issue date for any Subject Invention in any country in which the Subcontractor has applied for a patent;

   (ii) A report, not more often than annually, summarizing all Subject Inventions which were disclosed to DOE individually during the reporting period specified; or

   (iii) A report, prior to closeout of the subcontract, listing all Subject Inventions or stating that there were none.

ATTACHMENT 1
(For Reference)

PATENT RIGHTS-ACQUISITION BY THE GOVERNMENT (FEB 1995)
Derived from DEAR 952.227-13

The clause applies unless the awardee is a domestic small business or domestic nonprofit organization at the time of award, and the award is for the conduct of research, development or demonstration

As prescribed at 927.303(c), insert the following clause:

A. Definitions.

1. "Invention," as used in this clause, means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

2. "Practical application," as used in this clause, means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

3. "Subject Invention," as used in this clause, means any invention of the Subcontractor conceived or first actually reduced to practice in the course of or under this subcontract.

4. "Patent Counsel," as used in this clause, means the Department of Energy Patent Counsel assisting the procuring activity.

5. "DOE patent waiver regulations," as used in this clause, means the Department of Energy patent waiver regulations at 41 CFR 9-9.109-6 or successor regulations. See 10 CFR part 784.

6. "Agency licensing regulations" and "applicable agency licensing regulations," as used in this clause, mean the Department of Energy patent licensing regulations at 10 CFR Part 781.

B. Allocations of principal rights.

1. Assignment to the Government.

The Subcontractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each Subject Invention, except to the extent that rights are retained by the Subcontractor under subparagraph (B)(2) and paragraph (D) of this clause.

2. Greater rights determinations.

(i) The Subcontractor, or an employee-inventor after consultation with the Subcontractor, may request greater rights than the nonexclusive license and the foreign patent rights provided in paragraph (D) of this clause on identified inventions in accordance with the DOE patent waiver regulations. A request for a determination of whether the Subcontractor or the employee-inventor is entitled to acquire such greater rights must be submitted to the Patent Counsel with a copy to the DOE through NREL at the time of the first disclosure of the invention pursuant to subparagraph (E)(2) of this clause, or not later than 8 months thereafter, unless a longer period is authorized in writing by the DOE for good cause shown in writing by the Subcontractor. Each determination of greater rights under this subcontract shall be subject to paragraph (C) of this clause, unless otherwise provided in the greater rights determination, and to the reservations and conditions deemed to be appropriate by the Secretary of Energy or designee.

(ii) Within two (2) months after the filing of a patent application, the Subcontractor shall provide the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and, promptly upon issuance of a patent, provide the patent number and issue date for any Subject Invention in any country for which the Subcontractor has been granted title or the right to file and prosecute on behalf of the United States by the Department of Energy.

(iii) Not less than thirty (30) days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the Patent Counsel of any decision not to continue prosecution of the application.

(iv) Upon request, the Subcontractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

C. Minimum rights acquired by the Government.

1. With respect to each Subject Invention to which the Department of Energy grants the Subcontractor principal or exclusive rights, the Subcontractor agrees as follows:

(i) The Subcontractor hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced each Subject Invention throughout the world by or on behalf of the Government of the United States (including any Government agency).

(ii) The Subcontractor agrees that with respect to any Subject Invention in which DOE has granted it title, DOE has the right in accordance with the procedures in the DOE patent waiver regulations (10 CFR part 784) to require the Subcontractor, an assignee, or exclusive licensee of a Subject Invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Subcontractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if it determines that--

a. Such action is necessary because the Subcontractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the Subject Invention in such field of use;

b. Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Subcontractor, assignee, or their licensees;

c. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Subcontractor, assignee, or licensees; or

d. Such action is necessary because the agreement required by paragraph (I) of this clause has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any Subject Invention in the United States is in breach of such agreement.

(iii) The Subcontractor agrees to submit on request periodic reports no more frequently than annually on the utilization of a Subject Invention or on efforts at obtaining such utilization of a Subject Invention or on efforts at obtaining such utilization that are being made by the Subcontractor or its

licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Subcontractor, and such other data and information as DOE may reasonably specify. The Subcontractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by that agency in accordance with subparagraph (C)(1)(ii) of this clause. To the extent data or information supplied under this section is considered by the Subcontractor, its licensee, or assignee to be privileged and confidential and is so marked, the Department of Energy agrees that, to the extent permitted by law, it will not disclose such information to persons outside the Government or NREL.

(iv) The Subcontractor agrees, when licensing a Subject Invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a Subject Invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.

(v) The Subcontractor agrees to provide for the Government's paid-up license pursuant to subparagraph (C)(1)(i) of this clause in any instrument transferring rights in a Subject Invention and to provide for the granting of licenses as required by subparagraph (C)(1)(ii) of this clause, and for the reporting of utilization information as required by subparagraph (C)(1)(iii) of this clause, whenever the instrument transfers principal or exclusive rights in a Subject Invention.

2. Nothing contained in this paragraph (C) shall be deemed to grant to the Government any rights with respect to any invention other than a Subject Invention.

D. Minimum rights to the Subcontractor.

1. The Subcontractor is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a Subject Invention and any resulting patent in which the Government obtains title, unless the Subcontractor fails to disclose the Subject Invention within the times specified in subparagraph (E)(2) of this clause. The Subcontractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Subcontractor is a part and includes the right to grant sublicenses of the same scope to the extent the Subcontractor was legally obligated to do so at the time the

subcontract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Subcontractor's business to which the invention pertains.

2. The Subcontractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the Subject Invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Subcontractor has achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Subcontractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

3. Before revocation or modification of the license, DOE will furnish the Subcontractor a written notice of its intention to revoke or modify the license, and the Subcontractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Subcontractor) after the notice to show cause why the license should not be revoked or modified. The Subcontractor has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR Part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

4. The Subcontractor may request the right to acquire patent rights to a Subject Invention in any foreign country where the Government has elected not to secure such rights, subject to the conditions in subparagraphs (D)(4)(i) through (D)(4)(vii) of this clause. Such request must be made in writing to the Patent Counsel as part of the disclosure required by subparagraph (E)(2) of this clause, with a copy to the DOE Contracting Officer. DOE approval, if given, will be based on a determination that this would best serve the national interest.

   (i) The recipient of such rights, when specifically requested by DOE, and three years after issuance of a foreign patent disclosing the Subject Invention, shall furnish DOE a report stating:

      a. The commercial use that is being made, or is intended to be made, of said invention, and

      b. The steps taken to bring the invention to the point of practical application or to make the invention available for licensing.

(ii) The Government shall retain at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the Government (including any Government agency) and States and domestic municipal governments, unless the Secretary of Energy or designee determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments.

(iii) If noted elsewhere in this subcontract as a condition of the grant of an advance waiver of the Government's title to inventions under this subcontract, or, if no advance waiver was granted but a waiver of the Government's title to an identified invention is granted pursuant to subparagraph (B)(2) of this clause upon a determination by the Secretary of Energy that it is in the Government's best interest, this license shall include the right of the Government to sublicense foreign governments pursuant to any existing or future treaty or agreement with such foreign governments.

(iv) Subject to the rights granted in subparagraphs (D)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right to terminate the foreign patent rights granted in this subparagraph (D)(4) in whole or in part unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee that effective steps necessary to accomplish substantial utilization of the invention have been taken or within a reasonable time will be taken.

(v) Subject to the rights granted in subparagraphs (D)(1), (2), and (3) of this clause, the Secretary of Energy or designee shall have the right, commencing four years after foreign patent rights are accorded under this subparagraph (D)(4), to require the granting of a nonexclusive or partially exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, and in appropriate circumstances to terminate said foreign patent rights in whole or in part, following a hearing upon notice thereof to the public, upon a petition by an interested person justifying such hearing:

a. If the Secretary of Energy or designee determines, upon review of such material as he deems relevant, and after the recipient of such rights or other interested person has had the opportunity to provide such relevant and material information as the Secretary or designee may require, that such foreign patent rights have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates; or

b. Unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee at such hearing that the recipient has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.

(vi) If the Subcontractor is to file a foreign patent application on a Subject Invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures for such period of time as specified by Patent Counsel, but in no event shall the Government or its employees be liable for any publication thereof.

(vii) Subject to the license specified in subparagraphs (D)(1), (2), and (3) of this clause, the Subcontractor or inventor agrees to convey to the Government, upon request, the entire right, title, and interest in any foreign country in which the Subcontractor or inventor fails to have a patent application filed in a timely manner or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the Subcontractor or inventor shall, not less than 60 days before the expiration period for any action required by any patent office, notify the Patent Counsel of such failure or decision, and deliver to the Patent Counsel, the executed instruments necessary for the conveyance specified in this paragraph.

E. Invention identification, disclosures, and reports.

1. The Subcontractor shall establish and maintain active and effective procedures to assure that Subject Inventions are promptly identified and disclosed o Subcontractor personnel responsible for patent matters within 6 months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under this subcontract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of Subject Inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Subcontractor shall furnish the DOE a description of such procedures for evaluation and for determination as to their effectiveness.

2. The Subcontractor shall disclose each Subject Invention to the DOE Patent Counsel with a copy to the DOE Contracting Officer within 2 months after the inventor discloses it in writing to Subcontractor personnel responsible for patent matters or, if earlier, within 6 months after the Subcontractor becomes aware that a Subject Invention has been made, but in any event before any on sale, public

use, or publication of such invention known to the Subcontractor. The disclosure to DOE shall be in the form of a written report and shall identify the subcontract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Subcontractor shall promptly notify Patent Counsel of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Subcontractor. The report should also include any request for a greater rights determination in accordance with subparagraph (B)(2) of this clause. When an invention is disclosed to DOE under this paragraph, it shall be deemed to have been made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908, unless the Subcontractor contends in writing at the time the invention is disclosed that is was not so made.

3. The Subcontractor shall furnish the DOE through NREL the following:

   (i) Interim reports every 12 months (or such longer period as may be specified by the DOE) from the date of the subcontract, listing Subject Inventions during that period, and certifying that all Subject Inventions have been disclosed (or that there are not such inventions) and that the procedures required by subparagraph (E)(1) of this clause have been followed.

   (ii) A final report, within 3 months after completion of the subcontracted work listing all Subject Inventions or certifying that there were no such inventions, and listing all subcontracts at any tier containing a patent rights clause or certifying that there were no such lower-tier subcontracts.

4. The Subcontractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Subcontractor each Subject Invention made under subcontract in order that the Subcontractor can comply with the disclosure provisions of paragraph (C) of this clause, and to execute all papers necessary to file patent applications on Subject Inventions and to establish the Government's rights in the Subject Inventions. This disclosure format should require, as a minimum, the information required by subparagraph (E)(2) of this clause.

5. The Subcontractor agrees, subject to FAR 27.302(j), that the Government and NREL may duplicate and disclose Subject Invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause.

F. Examination of records relating to inventions.

1. The DOE or any authorized representative shall, until 3 years after final payment under this subcontract, have the right to examine any books (including laboratory notebooks), records, and documents of the Subcontractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this subcontract to determine whether--

   (i) Any such inventions are Subject Inventions;

   (ii) The Subcontractor has established and maintains the procedures required by subparagraphs (E)(1) and (4) of this clause;

   (iii) The Subcontractor and its inventors have complied with the procedures.

2. If the DOE learns of an unreported Subcontractor invention which the DOE believes may be a Subject Invention, the Subcontractor may be required to disclose the invention to DOE for a determination of ownership rights.

3. Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

G. Withholding of payment

(NOTE: This paragraph does not apply to lower-tier subcontracts.)

1. Any time before final payment under this subcontract, the DOE through NREL may, in the Government's interest, withhold payment until a reserve not exceeding $50,000 or 5 percent of the amount of this subcontract, whichever is less, shall have been set aside if, in the DOE's opinion, the Subcontractor fails to--

   (i) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each Subject Invention as required by this clause.

   (ii) Establish, maintain, and follow effective procedures for identifying and disclosing Subject Inventions pursuant to subparagraph (E)(1) of this clause;

(iii) Disclose any Subject Invention pursuant to subparagraph (E)(2) of this clause;

(iv) Deliver acceptable interim reports pursuant to subparagraph (E)(3)(i) of this clause; or

(v) Provide the information regarding lower-tier subcontracts pursuant to subparagraph (H)(4) of this clause.

2. Such reserve or balance shall be withheld until the DOE has determined that the Subcontractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.

3. Final payment under this subcontract shall not be made before the Subcontractor delivers to the DOE all disclosures of Subject Inventions required by subparagraph (E)(2) of this clause, and acceptable final report pursuant to subparagraph (E)(3)(ii) of this clause, and the Patent Counsel has issued a patent clearance certification to the DOE Contracting Officer.

4. The DOE through NREL may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the subcontract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government rights.

H. Lower-tier Subcontracts.

1. The Subcontractor shall include the clause at 48 CFR 952.227-11 (suitably modified to identify the parties) in all subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work to be performed by a small business firm or domestic nonprofit organization, except where the work of the lower-tier subcontract is subject to an Exceptional Circumstances Determination by DOE. In all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work, the Subcontractor shall include this clause (suitably modified to identify the parties). The Subcontractor shall not, as part of the consideration for awarding the lower-tier subcontract, obtain rights in the lower-tier subcontractor's Subject Inventions.

2. In the event of a refusal by a prospective lower-tier subcontractor to accept such a clause the Subcontractor--

(i) Shall promptly submit a written notice to the DOE through NREL setting forth the lower-tier subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and

(ii) Shall not proceed with such lower-tier subcontract without the written authorization of the DOE.

3. In the case of subcontracts at any tier, DOE, the lower-tier subcontractor, and Subcontractor agree that the mutual obligations of the parties created by this clause constitute a subcontract between the lower-tier subcontractor and DOE with respect to those matters covered by this clause.

4. The Subcontractor shall promptly notify the DOE through NREL in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the lower-tier subcontractor, the applicable patent rights clause, the work to be performed under the lower-tier subcontract, and the dates of award and estimated completion. Upon request of the DOE, the Subcontractor shall furnish a copy of such lower-tier subcontract, and, no more frequently than annually, a listing of the lower-tier subcontracts that have been awarded.

5. The Subcontractor shall identify all Subject Inventions of the lower-tier subcontractor of which it acquires knowledge in the performance of this subcontract and shall notify the Patent Counsel, with a copy to the DOE through NREL, promptly upon identification of the inventions.

I. Preference for United States industry.

Unless provided otherwise, no Subcontractor that receives title to any Subject Invention and no assignee of any such Subcontractor shall grant to any person the exclusive right to use or sell any Subject Invention in the United States unless such person agrees that any products embodying the Subject Invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Government upon a showing by the Subcontractor or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

J. Atomic energy.

1. No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted with respect to any invention or discovery made or conceived in the course of or under this subcontract.

2. Except as otherwise authorized in writing by the DOE, the Subcontractor will obtain patent agreements to effectuate the provisions of subparagraph (E)(1) of this clause from all persons who perform any part of the work under this subcontract, except nontechnical personnel, such as clerical employees and manual laborers.

K. Background Patents.

1. "Background Patent" means a domestic patent covering an invention or discovery which is not a Subject Invention and which is owned or controlled by the Subcontractor at any time through the completion of this subcontract:

(i) Which the Subcontractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and

(ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture, or composition of matter (including relatively minor modifications thereof) which is a

subject of the research, development, or demonstration work performed under this subcontract.

2. The Subcontractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any Background Patent for purposes of practicing a subject of this subcontract by or for the Government in research, development, and demonstration work only.

3. The Subcontractor also agrees that upon written application by DOE, it will grant to responsible parties, for purposes of practicing a subject of this subcontract, nonexclusive licenses under any Background Patent on terms that are reasonable under the circumstances. If, however, the Subcontractor believes that exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Subcontractor.

4. Notwithstanding subparagraph (K)(3) of this clause, the Subcontractor shall not be obligated to license any Background Patent if the Subcontractor demonstrates to the satisfaction of the Secretary of Energy or designee that:

(i) A competitive alternative to the subject matter covered by said Background Patent is commercially available or readily introducible from one or more other sources; or

(ii) The Subcontractor or its licensees are supplying the subject matter covered by said Background Patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

L. Publication.

It is recognized that during the course of the work under this subcontract, the Subcontractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this subcontract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Subcontractor, patent approval for release of publication shall be secured from Patent Counsel prior to any such release or publication.

M. Forfeiture of rights in unreported Subject Inventions.

1. The Subcontractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any Subject Invention which the Subcontractor fails to report to Patent Counsel within six months after the time the Subcontractor:

(i) Files or causes to be filed a United States or foreign patent application thereon; or

(ii) Submits the final report required by subparagraph (E)(2)(ii) of this clause, whichever is later.

2. However, the Subcontractor shall not forfeit rights in a Subject Invention if, within the time specified in subparagraph (M)(1) of this clause, the Subcontractor:

(i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the subcontract and delivers the decision to Patent Counsel, with a copy to the DOE through NREL; or

(ii) Contending that the invention is not a Subject Invention, the Subcontractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the DOE through NREL; or

(iii) Establishes that the failure to disclose did not result from the Subcontractor's fault or negligence.

3. Pending written assignment of the patent application and patents on a Subject Invention determined by the Secretary of Energy or designee to be forfeited (such determination to be a final decision under the Disputes clause of this subcontract), the Subcontractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph (M) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to Subject Inventions.